

What is claimed is:

1 1. A white light emitting device, comprising:
2 a light emitting element having a peak wavelength of **500**
3 nm or less;
4 a first phosphor absorbing a light emitted from the light
5 emitting element and emitting a light having a yellow wavelength
6 different from a wavelength of the light absorbed; and
7 a second phosphor having an emission wavelength different
8 from at least that of the first phosphor.

1 2. The white light emitting device as defined in claim
2 1, wherein:
3 the emission wavelength is a peak wavelength of **400** nm or
4 less.

1 3. The white light emitting device as defined in claim
2 1, wherein:
3 the second phosphor includes one or more of phosphors
4 having blue through red emission wavelengths.

1 4. The white light emitting device as defined in claim
2 1, wherein:
3 the second phosphor includes any or all of phosphors
4 emitting a blue light, a red light, and a green light,
5 respectively.

1 5. The white light emitting device as defined in claim
2 1, wherein:

3 the first phosphor is an alkaline earth metal silicate.

1 6. The white light emitting device as defined in claim
2 1, wherein:

3 the first phosphor is an alkaline earth metal silicate
4 activated with europium.

1 7. The white light emitting device as defined in claim
2 1, wherein:

3 the first phosphor is an alkaline earth metal
4 orthosilicate activated with divalent europium represented by
5 a formula:

6 $(2-x-y) \text{ SrO} \cdot x (\text{Ba, Ca}) \text{O} \cdot (1-a-b-c-d) \text{ SiO}_2 \cdot a \text{ P}_2\text{O}_5 \cdot b \text{ Al}_2\text{O}_3$
7 $c \text{ B}_2\text{O}_3 \cdot d \text{ GeO}_2 \cdot y \text{ Eu}^{2+}$

8 wherein $0 < x < 1.6$, $0.005 < y < 0.5$, $0 < a, b, c, d < 0.5$;
9 and/or an alkaline earth metal orthosilicate represented by a
10 formula:

11 $(2-x-y) \text{ BaO} \cdot x (\text{Sr, Ca}) \text{O} \cdot (1-a-b-c-d) \text{ SiO}_2 \cdot a \text{ P}_2\text{O}_5 \cdot b \text{ Al}_2\text{O}_3$
12 $c \text{ B}_2\text{O}_3 \cdot d \text{ GeO}_2 \cdot y \text{ Eu}^{2+}$

13 wherein $0.01 < x < 1.6$, $0.005 < y < 0.5$, $0 < a, b, c, d$
14 < 0.5 ; in this case, at least one of the values a, b, c , and
15 d is advantageously more than 0.01 .

1 8. The white light emitting device as defined in claim
2 1, wherein:

3 the red, green, blue and/or yellow phosphor(s) is (are)
4 mixed into a covering member covering the light emitting
5 element.

1 9. The white light emitting device as defined in claim
2 8, wherein:

3 the red, green, blue and/or yellow phosphor(s) to be mixed
4 into the covering member is (are) mixed into at the vicinity
5 of the light emitting element in a high density condition.

1 10. The white light emitting device as defined in claim
2 8, wherein:

3 the red, green, blue and/or yellow phosphor(s) is (are)
4 further mixed also in an insulative adhesive material for fixing
5 the light emitting element to a lead frame.

1 11. A white light emitting device; comprising:

2 a light emitting element made of a GaN-based semiconductor
3 and emitting a purple light which is disposed in a cup of a mount
4 lead; and

5 a sealant made of a transparent resin filled in the cup
6 and sealing the light emitting element;

7 red, green, and blue phosphors absorbing a light emitted
8 from the light emitting element and emitting red, green, and
9 blue lights of wavelengths different from that of the light
10 absorbed, respectively, and a yellow phosphor absorbing a light
11 emitted from the light emitting element and emitting a yellow
12 light of a wavelength different from that of the light absorbed
13 being mixed into the sealant.

1 12. The white light emitting device as defined in claim
2 11, wherein:

3 the white light emitting device comprises further a

4 lens-shaped mold member made of a transparent resin and covering
5 the cup filled with the sealant and a part of the mount lead.

1 13. A white light emitting device, comprising:

2 a light emitting element made of a GaN-based semiconductor
3 and emitting a purple light which is disposed in a cup of a mount
4 lead;

5 a sealant made of a transparent resin filled in the cup
6 and sealing the light emitting element;

7 a lens-shaped mold member made of a transparent resin and
8 covering the cup filled with the sealant and a part of the mount
9 lead; and

10 a fluorescence cover fitted to the mold member and to which
11 red, green, and blue phosphors absorbing a light emitted from
12 the light emitting element and emitting red, green, and blue
13 lights of wavelengths different from that of the light absorbed,
14 respectively, are mixed into;

15 a yellow phosphor absorbing a light emitted from the light
16 emitting element and emitting a yellow light of a wavelength
17 different from that of the light absorbed is mixed into the
18 fluorescence cover.

1 14. A white light emitting device, comprising:

2 a light emitting element emitting a purple light; and

3 a substantially rectangular light guidance plate guiding
4 a light emitted from the light emitting element to outgo the
5 light from a light-outgoing surface;

6 red, green, and blue phosphors absorbing a light emitted
7 from the light emitting element and emitting red, green, and

8 blue lights of wavelengths different from that of the light
9 absorbed, respectively, and a yellow phosphor absorbing a light
10 emitted from the light emitting element and emitting a yellow
11 light of a wavelength different from that of the light absorbed
12 being applied onto the light-outgoing surface of the light
13 guidance plate.

1 15. A white light emitting device, comprising:
2 a light emitting element emitting a purple light;
3 a substantially rectangular light guidance plate guiding
4 a light emitted from the light emitting element to outgo the
5 light from a light-outgoing surface; and
6 a film to which red, green, and blue phosphors absorbing
7 a light emitted from the light emitting element and emitting
8 red, green, and blue lights of wavelengths different from that
9 of the light absorbed, respectively, are mixed into;
10 a yellow phosphor absorbing a light emitted from the light
11 emitting element and emitting a yellow light of a wavelength
12 different from that of the light absorbed being mixed into the
13 film.